REMARKS

Response is hereby made to the Office Action dated October 3, 2003. By this Response, Applicant has amended claims 1-10, 18, 21-23, 30-36, 42, 45-46, 49, 60-61, 66, 90, 102, 105-110, and 116 without prejudice or disclaimer. Claims 1-116 (8 independent, 116 dependent) are pending in this Application.

Applicant hereby petitions and requests that the Commissioner extend the shortened statutory period for response to the October 3, 2003 Office Action until March 3, 2003. Applicant has enclosed a check with this Response for the $210 small entity fee set forth in 37 CFR § 1.17(a)(2). Although no additional fee is believed to be required at this time, the Commissioner is authorized and requested to debit any fees that may be required (including any fees for additional claims or extensions of time) from Deposit Account No. 50-2117 to avoid abandonment of this Application.

Specification

The Office Action objects to Applicant's use of trademarked terminology, stating that such language requires a "TM" symbol. The Office Action does not cite to a statutory basis for the objection, nor has Applicant been able to identify such a requirement in statute or rule. Indeed, Applicant has reviewed MPEP § 608.01(v), which deals with trademark use in the Specification, and respectfully asserts that the present specification is in conformance with the requirements therein, as each of the marks used have definite meanings and respect the proprietary marks of the mark holders. Each of the marks are properly used as adjectives, with none of the marks used in a generic sense. Further, Applicant respectfully believes that identifying federally-registered marks such as "Microsoft" and "MacOS" with a "TM" rather than a "®" symbol would be improper use of such marks. Reconsideration and elaboration of the statutory basis for the rejection is respectfully requested.

Claim Objections

The Office Action points out a typographical error in claim 45 that Applicant has corrected by this Response. Applicant has also made numerous formalistic changes to the claims (e.g. correcting dependency issues and typographical errors, conforming language to amendments in parent claims, and repairing several antecedent basis issues, particularly in the dependent claims). These amendments are strictly for cosmetic reasons, however, and are not made for purposes relating to patentability. Applicant therefore does not wish to surrender any range of legal equivalents to which it would otherwise be entitled.

The Office Action also objects to claims 96 and 97 as containing trademark language without a "TM" symbol. Although Applicant has not inserted the "TM" symbol for the reasons set forth above, Applicant has amended the claims to clearly use the marks in an adjective, non-generic sense. Reconsideration is requested.

Section 112 Rejections

The Office Action rejects claims 3, 45, 66 as having improper dependency, and also rejects claims 18, 60 and 61, stating that the term "substantially" is indefinite. Without consenting to the rejections, Applicant has amended each of the cited claims as suggested.

Prior Art Rejections

Section 102 Rejections

The Office Action rejects claims 1-20, 42-49, 51, 62-69, 75-82, 86, 89-90, 98-101 and 105-115 under 35 U.S.C. § 102(b), stating that each of these claims are anticipated by US Patent No. 5,680,547 ("Chang"). Applicant respectfully traverses the rejections in that the Chang reference fails to disclose each and every element of the cited claims.

Generally speaking, the Chang reference describes a pre-boot technique for information transfer between a client and a server computer (col. 2, lines 8-11). The technique is embedded within a specialized hardware component (e.g. a ROM or PROM) that is placed on the motherboard or LAN adapter board of a client computer (see Abstract, lines 10-17). The specialized hardware queries a network attached to the computer prior to boot-up of the operating system to obtain information from the server. This functionality is similar to that of the PXE specification referenced in the present specification; that is, it is simply a pre-boot communications environment that allows a computer to access a network using BIOS prior to loading the operating system.

Although Chang does describe pre-boot network access, it is simply concerned with a client-side implementation and mentions the server side functions only in passing. That is, the reference deals solely with the specialized hardware used to provide pre-boot communication. Chang does not provide any detail whatsoever of an administration server or of any implementations of the pre-boot environment, but only lists a number of possible uses of the pre-boot communication in broad terms in column 3. The sole discussion of a server application within the detailed description section of Chang is found at col. 4, lines 55 through col. 5, line 37 (with reference to server 11 in FIG. 1). This discussion is also limited

to a conceptual discussion of server functions, with no details as to the implementation of an actual server.

The claims of the present invention, in contrast, describe systems, techniques, devices, etc. that exploit pre-boot functionality to a level not contemplated by the Chang reference, or by any other reference of record. Various claims, for example, recite specific techniques for managing multiple non-identical workstations within a networked environment through the use of multiple sets of management instructions selected based upon attributes of the particular workstation. Other claims further recite techniques for determining the workstation attributes from the server before the workstation has booted, and/or numerous other aspects of administering a plurality of client computers. Such functionality is far beyond the scope of Chang's disclosure.

Simply stated, the fact that a client computer and a server are allowed to communicate with each other in a pre-boot sequence does not obviate or make inherent the particular server-side functionalities built upon such features. Indeed, the fact that no other party has created or expressly described systems or methods as recited in Applicant's claims is strong evidence of the novelty thereof. Each of the various independent claims are considered in turn below.

Beginning with claim 1, Chang does not disclose at least the element of *selecting one of a plurality of management instructions for said client computer at said server computer based upon said attributes of said client computer*. While Chang does disclose pre-boot communication between a client and a server management application, Chang does not contemplate a server management application that maintains a plurality of instruction sets, or a server management application that selects a particular instruction set based upon the attributes obtained from the client in the pre-boot environment.

The Office Action essentially acknowledges that these features are not expressly found in the Chang reference, stating that "it is inherent that the application...selects the appropriate management instructions for each client machine". Applicant respectfully disagrees that such functionality is "inherent". To the contrary, such applications in the past have simply provided the same instruction set to each client requesting boot information (*see* Chang, col. 4, line 10, showing both workstations in the disclosed system as having identical configurations). As evidenced by the longfelt lack of products that have provided such functionality and the absence of language disclosing this aspect in Chang or any other

reference, it is not at all inherent to select the instructions provided to the client computer from a plurality of different instructions as a function of the attributes of the client computer. To the contrary, the enhancements provided by Applicant's claims provide substantial benefit over prior art systems, and are therefore non-obvious, particularly from the limited disclosure of the Chang reference with regard to selection of instructions provided. Reconsideration and/or further citation to a prior art reference is respectfully requested.

The "attributes" aspect of the present invention is further described in claim 2. As recited therein, the server provides an application to the client computer prior to the receiving step. This application provided by the server then determines the attributes of said client computer and provides these attributes back to the server. The Office Action states that such functionality is inherent in the Chang disclosure, citing to column 3, lines 31-33, which simply states that one example of a "possible server management application" is "remote software installation, distribution, metering and diagnostics", without further elaboration or detail. These seven words do not describe any techniques or systems for accomplishing these tasks, nor do they relate in any way to providing a configuration determination application from the server to the client. Indeed, by describing the functions of software diagnostics as a "server management application", the cited portion of the reference actually teaches away from the language of Applicant's claim 2. The various claims depending from claim 2 further recite particular attributes of the client computer that can be evaluated with the configuration determination program. None of these aspects are even remotely disclosed in the Chang reference.

The Office Action similarly rejects independent claim 42. In addition to the language relating to "selecting one of a plurality of management instructions based upon the attributes of the client computer" discussed in conjunction with claim 1, claim 42 further recites "*providing a configuration determination program from a server in response to a request from said client computer, said configuration determination program being configured to identify attributes of said client computer and to provide said attributes to said server*".

The Office Action states that Chang discloses this aspect of claim 42 in column 2, lines 48-52 and 65-66. Upon review of this language, however, it is clear that Chang merely states that the client communicates with the server and makes client resources available to a server management application running on the server, and that the server is able to provide

boot files to the client. No mention whatsoever is made of providing a program from the server to the client that determines the attributes of the client and provides these attributes back to the server. Merely providing a boot file from the server to the client as described by Chang would not allow the server to identify the attributes of the client, or to select a set of management instructions based upon the attributes of the client. Accordingly, the limited disclosure of Chang could not produce the beneficial results of Applicant's claim 42. Applicant therefore disputes the Office Action's conclusion that disclosed 'boot file' is equivalent to the boot configuration program recited in claim 42. Reconsideration of the rejection is requested.

With respect to claim 90, Applicant once again points out that Chang fails to disclose providing different instructions to different client computers based upon attributes of the client computer. Furthermore, Applicant respectfully disagrees that the "scripting language" referenced at column 4, line 33 discloses the plurality of scripts recited in claim 90. In particular, the reference simply states that the workstation executes administrative utilities, which may include a scripting language. Chang does not elaborate as to where such utilities reside, and in any case does not disclose a plurality of scripts stored on the server and sent to different client computers based upon the attributes of each client computer. Reconsideration is requested.

With respect to claim 105, Applicant submits that the Chang reference fails to disclose at least "*means for associating said boot message with an entry in a database to determine administration steps to be performed on said one of said plurality of client computers*", as described above. Although the Office Action states that Chang discloses a database, the Office Action does not address the limitation that of associating the boot message with an entry in the database to determine administration steps to be performed on the client computer. Reconsideration is requested.

With respect to claim 111, Applicant submits that Chang does not describe at least the claimed elements of "said response comprises a file checking program configured to be executed on said client computer" and "receiving an index of files on said client computer from said file checking program". The Office Action essentially acknowledges that these aspects are not expressly disclosed in Cheng, yet claims that such functionality is "inherent" that any crash recovery program would include the file checking program and index elements of Applicant's claims. Applicant vigorously disputes this assertion in that even if

the Cheng system were able to provide crash recovery, it is not necessary that it perform file checking, that the file checking program come from the server, or that the file checking routine make use of an index. It is entirely possible, for example, that such a system would simply replace all of the files on the workstation, without considering which files are present or missing. Moreover, Applicant notes that Chang's entire disclosure of crash recovery amounts to three words ("workstation crash recovery") in a list of potential server functions found in the invention summary of column 2. To extrapolate these three words as inherently disclosing all of the elements of applicant's claim is manifestly unfair. Reconsideration and citation to a prior art reference is requested.

Applicant's dependent claims add further limitations to the various independent claims, and are therefore believed to be patentable for the reasons set forth above. A detailed analysis of each rejection is therefore not required at this time. Nevertheless, Applicant does not consent to any of the rejections in the Office Action, and expressly reserves the right to separately dispute the patentability of any dependent claim at a later date.

Section 103 Rejections

The Final Office Action also rejects claims 21-40, 50, 52-61, 70-74, 92-94 and 116 under 35 U.S.C. § 103, citing the combination of Chang ("Yamazaki") in view of US Patent No. 5,768,119 ("Havekost"). Applicant respectfully traverses the rejections in that neither reference considered alone or in combination with the other anticipates each and every element of the present claims.

The Havekost reference generally discloses a process control system for an industrial network of valves, switches and the like (col. 2, lines 10-20). The system has a centralized personal computer that communicates with the valves, switches and other components via a network. Havekost further describes a software structure used to control the alarms produced by the various valves and switches that admittedly uses several of the same keywords used in Applicant's claims. As these keywords are reviewed in context, however, it is clear that the Havekost system merely gathers data (alarms) from the various process control equipment (valves, switches, sensors) and uses this data to trigger responses on the central server. Indeed, Havekost is in no way concerned with providing configuration instructions or otherwise administering the remote processing nodes, since such nodes are relatively "dumb" industrial control devices and not client workstations.

Accordingly, not only do the Havekost keywords fail to disclose the various elements recited in Applicant's claims, but one skilled in the art would not be incented to modify the Havekost system, since that system is concerned with entirely different environments and goals. Further, even if the Havekost system were combined with the Chang system as suggested in the Office Action, the combination of the two would still fail to disclose each and every element of Applicant's claims.

Applicant's independent claim 26, for example, recites "a plurality of workstation objects each associated with one of a plurality of template objects". The Office Action alleges that Havekost discloses "attributes objects" for the remote devices, then states that "it would be inherent" that these objects would be associated with template objects. Once again, this statement is not supported by the reference. First, Havekost does not deal with workstations that have attributes; the "attributes" objects of the Havekost reference simply describe the outputs of sensors, valves and the like. Moreover, the sole instance of the word "template" in the Havekost reference simply describes a generic object "class" as "a template for an object". This language simply defines the term "class" in accordance with standard object-oriented programming terminology; it does not describe a plurality of objects that are themselves template objects. Havekost describes neither a "workstation object" nor a "template object" of any type; it therefore cannot describe a workstation object associated with a template object.

Further, claim 26 recites that the template objects are associated with event objects, and that the event objects are associated with scripts that comprise instructions to be executed by the plurality of workstations. Once again, Havekost does not relate to workstations and does not disclose template objects. The associations articulated in Applicant's claims are in no way even remotely considered by the Havekost reference. Although the Office Action claims that the incentive to combine the various keywords of the Havekost reference is provided by column 2, lines 49-52 of Chang, this cited language simply states that a client computer is able to communicate with a server using the BIOS of the workstation. Accordingly, this language has nothing to do with object interrelationships or associations. Absolutely no motivation or suggestion for the particular object associations is provided by either reference, and even if such a suggestion were provided, the Havekost reference entirely fails to disclose the various object interrelations recited in Applicant's claims. Reconsideration is requested.

Applicant's claim 116 recites a method for maintaining a registry on a client computer. In addition to the various reasons for patentability set forth above, this claim recites numerous aspects relating to the registry of the client that are plainly not disclosed in any reference of record. The Office Action notes that Havekost does use the word "registry" (at col. 31, line 47) to describe a database that holds configuration data for the various remote devices. As will be appreciated by those skilled in the art, however, modern operating systems (e.g. the various versions of the Microsoft Windows operating system, see page 32, lines 11-16 of the present Specification) contain a registry file that controls various parameters of the operating system. This registry file resides on the client computer, and can be maintained from the server through the use of a registry checking program as recited in the claim. Absolutely no mention of this type of registry, of updating or verifying the registry, or of a registry checking program is found in any reference of record. Reconsideration is requested.

The remaining claims are further rejected in view of various combinations of Chang, Havekost and/or US Patent No. 5,692,129 ("Sonderegger"). With respect to claim 102, the remaining independent claim, the Office Action states that it would be obvious to combine the teachings of Chang, Havekost and Sonderegger to create the claimed system. Once again, Applicant notes that the base reference, Chang, fails to disclose any aspects of an adminstrative server beyond broad statements of functionality discussed above. In particular, Chang does not discuss selecting one of a plurality of configuration scripts to be executed by one of a plurality of client computers. Further, other aspects of claim 102 are not disclosed by the other references, as set forth in additional detail above.

The Office Action states that it would be obvious to one of ordinary skill in the art to combine the teachings of Chang with those of Havekost in addition to those of Sonderegger for the purpose of creating a method and apparatus for maintaining a computer system to enable the workstation to communicate with a server on the network and make the necessary resources of the workstation available to a server management application running on the server via the network. This statement, however, simply states the benefits provided by Applicant's invention, and fails to provide any justification whatsoever for the combination.

In summary, then, no single reference of record nor any combination of references can expressly or impliedly disclose each and every element of Applicant's claims, particularly as amended after entry of the present Amendment. Each of the claims facially

relate to administering a plurality of client computers with a central server using a plurality of configuration scripts; at least this aspect beyond the disclosure of any of the cited references.

Although Applicant does not consent to any of the rejections of the dependent claims, each of these claims are believed to be patentable a fortiori in view of the above analysis, and a detailed analysis is not required at this point. Applicant reserves the right to separately address the patentability of any dependent claim at a later date.

Conclusion

Because none of the references anticipate each and every element of the presently-claimed inventions, Applicant believes that the present Application is in condition for Allowance, and earnestly solicits a Notice of Allowance at the Examiner's earliest convenience.

Should the Examiner have any questions or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (480) 385-5060 or bcarlson@ifllaw.com.

Respectfully submitted,

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